Securitex Wireless Digital Pin-Access RadioKey- (WDPA-Radiokey)

Securitex WDPA-Radiokey was designed for access control into secured facilities where installation of the normal Access Control keypad is not possible. This could be due to the location where the keypad is to be installed is a glass panel or special material which does not allow normal keypad to be installed. Furthermore laying cable from keypad to the access control and locking system is not possible like on marble, granite or even metal clad wall etc.

With the WDPA-Radiokey the keypad can be secured on to this surface using special adhesive and the secured code transmitted to the Wireless receiver (MR1E) integrated to the access control system to release the electromagnetic lock.

Area of used
The WDPA-Radiokey can be use indoor and outdoor area. This keypad is very suitable to be install on Boat, Caravan, Garages Door. Warehouse roller shutter, Automatic Barrier system. Automatic Gate, Office Glass Door and even as a home automation keyboard to activate lights, fan, air-condition etc, as for industries can be use to start stop machine like pumps, compressors etc. the application is limitless.

DESCRIPTION
RADIOKEYB is a numeric battery-powered keyboard for the radio transmission of fixed-length, 5-digit codes (which may be addressed on channels A, B, C and D) to receivers of the Multipass and Roll series.

2. APPLICATIONS
Can be used to enter and store access codes for any restricted access device such as automatic doors and gates, lights, and so on. The keyboard does not require laying of cables and is also suitable for outdoor installation. The front panel is secured by means of screws and the keyboard itself, with incorporated LEDs, is protected by a soft-touch semitransparent plastic cover. An appropriate compartment is provided for fitting in the battery.

Note: Features tamper-proof case and electronics. Access to the electronics does not permit to activate the command.

3. TECHNICAL FEATURES
Transmission frequency	433.92 MHz
Duration of transmission	about 1 sec
Operating range	40 meters to 70 meters
Battery life	5000 commands, when used with alkaline battery
Type of code	Multipass
Signaling devices	Rear-illuminated LEDs and buzzer
No. Of channels	4, can be selected from the keyboard
Dimensions and weight	73 x 80 x 33 mm – 160 grams
Power supply	9V alkaline battery
Insulation Class	IP 54
Power consumption	Nil when not operating, 5mA for keyboard operations, 30mA for transmission

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4. MOUNTING INSTRUCTIONS
Open the case and secure the bottom to the support. Link up the battery and re-close (see fig. 2 and 3). The system is now ready to operate.
Note: In case of outdoor installation, it is recommended that the seals and washers provided be employed in order to prevent water infiltration (see Figure 1).

5. OPERATION
Once the system has been powered, the codes can be programmed proceeding as follows:
a) Press the programming key on the receiver to access the learning mode.

b) Digit in the code and select one of the four channels (A, B, C or D) by pressing the corresponding key. Exit from the learning mode by pressing the appropriate key on the receiver or wait for 10 seconds for the system to automatically exit from the learning mode.

5.1. ENTERING NEW CODES
The number of codes which may be stored depends on the receiver memory capacity (Multipass RPA function).

a) Digit in a code already stored in the memory of the receiver and press key # (Example: 12345 #).
b) Enter a new code and select one of the four channels by pressing the appropriate key (Example: 67890 A).
c) Repeat step **"b"** above within 10 seconds to enter other new codes
d) After 10 seconds of a code not being entered, the system automatically exists from the programming mode and becomes operative again.

6. NOTES
Pressing of any key set off the buzzer and light up the LEDs. After transmission has been made or upon the * key being pressed, the system returns to stand-by. Pressing of the # key permits to program and enter new codes via radio commands (Multipass RPA function). The keyboard is provided with a battery charge indicator which sets off both an intermittent warning light and the buzzer when the battery is flat.

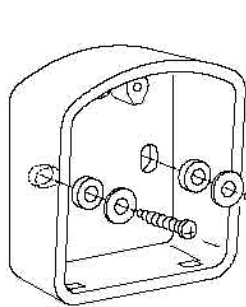Can be employ in conjunction with all 433 MHz Multipass and Multipass Roll receivers.
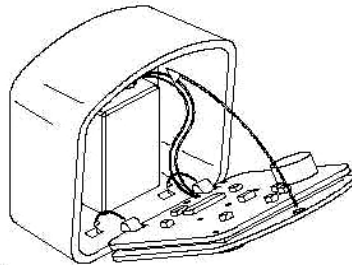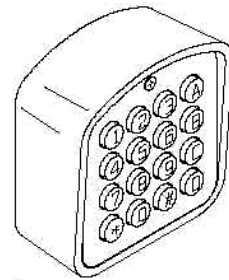

Fig. 1   Fig. 2   Fig. 3

MR1E Receiver operation manual
1. GENERAL INFORMATION
The receiver integrates the functions of receiver and decoder of standard and Rolling Code codes. It memory is capable of memorizing up to 200 different codes, both standard and rolling, generated by transmitters of the MULTIPASS family.

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2. ROLLING CODIFICATION

The purpose of this codification is to prevent the possibility of violation of the code by capture and retransmission. Rolling code involves the transmission of a batch of bits consisting of a constant part, different for each transmitter, the channel bits related to the transmitter switch activated plus a part that varies with each transmission in a pseudo-random manner (rolling code) in accordance with a proprietary Prastel algorithm. Configuration of these bits varies unpredictably between two consecutive transmissions. The receiver, by self-learning, memorizes the constant part of the code of each transmitter plus the appropriate rolling code and updates the latter at each transmission. The transmitter is recognized only if it sends a rolling code corresponding to the 255 configurations subsequent to the last recognized transmission. Nevertheless it allows realignment and recognition of a previously memorized transmitter that has overrun the permitted interval (e.g. due to an excess of unrecognized transmissions or on replacement of power supply batteries) by pressing and releasing the transmitter learning button; in this way the correctness of the code is analyzed, maintaining the advantages of the variable codification. **RPA Function** (Transmitter remote self-learning command)

3. MAIN TECHNICAL FEATURES

Power supply	12 - 24 VAC/DC
Average Work/Rest consumption	22 mA / 40 mA
Reception frequency	433.920 MHz
Number of codes capacity	200 (MR1E)
Number of channel	1
Types of output	Mono-stable (Momentary) or bi-stable (Latch) Output Relay
Contact capacity	0,5 A @ 24 VAC/DC
Signals	Red led
Working temperature	-20/+55 °C
Storage temperature	-40/+85 °C
Size / Weight	100 x 55 x 22 mm 70g

4. SELECTION OF SUPPLY VOLTAGE

The receiver can be supplied through terminals 1 and 3 at 24 V or 12 VAC/DC.

5. CODE PROGRAMMING AND CANCELLATION

Operations of inserting a new code into the memory and canceling the whole list of codes can be carried out using the same button P1 on the receiver.

Programming
• Power up the receiver correctly.
• Press button P1: the red led lights up indicating that programming is in progress.
• Carry out a transmission pressing any transmitter button.
• The code is inserted into the memory. The LED flashes during insertion. At the end the led returns to the non-flashing state, indicating that a new code may be inserted.
• Memorize all the transmitters by carrying out a transmission with each one.
• At the end of the operation press button P1 again to exit from the procedure. The led goes out. Exit from the programmed comes about automatically in any case 10 seconds after the last memorization.
• The codes remain in the memory even if the power supply is cut.

Total cancellation of codes
• Hold button P1 pressed until the red led starts flashing.
• Press button P1 again within 6 seconds to confirm cancellation. Confirmation is indicated by the led flashing with greater frequency.

6. CHANNEL ADDRESS

The receiver's output relay can be activated by only one of the four channels available, after selecting the channel required by means of the receiver's JP3 jumpers (Fig. 1), of a transmitter of the MULTIPASS family operating on a frequency of 433.920 Mhz.

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7. SELECTION OF TYPE OF OUTPUT RELAY

The receiver's on-board relay may be of a monostable or bistable type depending on how the JP2 jumpers are configured (jumper closed: monostable; jumper open: bistable).
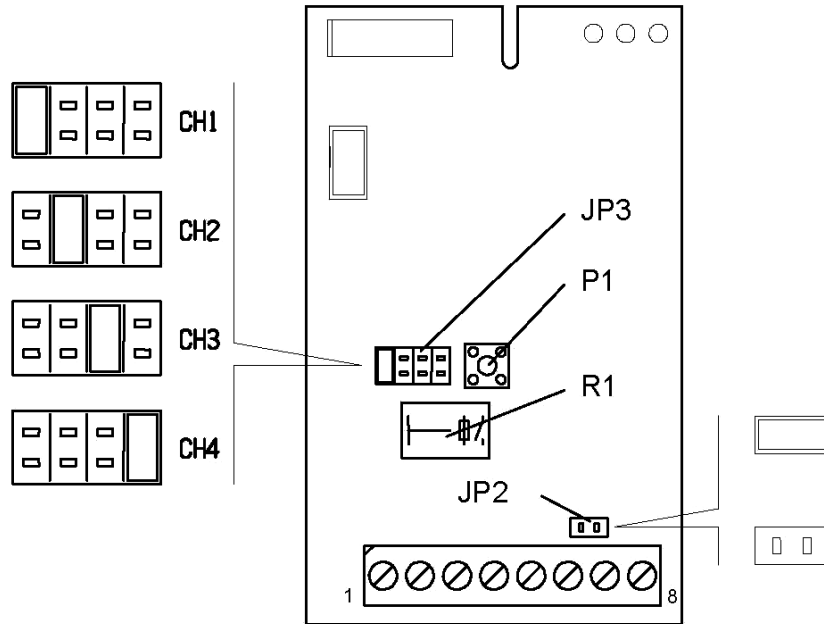
MORSETTIERA	TERMINAL LIST	BOITE A BORNES	KLEMMENBRETT	TABLERO DE BORNES
1) +24V	1) +24V	1) +24V	1) +24V	1) +24V
2) GND	2) GND	2) GND	2) GND	2) GND
3) +12V	3) +12V	3) +12V	3) +12V	3) +12V
4) N.O.	4) N.O.	4) N.O.	4) N.O.	4) N.A.
5) COM	5) COM	5) COM	5) COM	5) COM
6) N.C.	6) N.C.	6) N.S.	6) N.C.	6) N.C.
7) Calza antenna	7) Antenna braid	7) Gaine blindée antenne	7) Antennenumklöppelung	7) Guaina antena
8) Centrale antenna	8) Antenna core	8) Centrale antenne	8) Mittelleiter Antenne	8) Central antena

SAFETY WARNINGS

These warnings are an integral and essential part of the product and must be delivered to the user. Read them carefully: they provide important installation, operating and maintenance instructions. Keep this form and give it to any persons who may use the system in the future. Incorrect installation or improper use of the product may cause serious danger.

INSTALLATION INSTRUCTIONS

• Installation must be performed by a qualified professional and must observe all local, state, national and European regulations.
• Before starting installation, make sure that the product is in perfect condition.
• Laying, electrical connections and adjustments must be done to "Industry Standards".
• Packing materials (cardboard, plastic, polystyrene, etc.) are potentially dangerous. They must be disposed of properly and kept out of the reach of children
• Do not install the product in an explosive environment or in an area disturbed by electromagnetic fields.
• The presence of gas or inflammable fumes is a serious safety hazard.

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• Provide an over voltage protection, mains/knife switch and/or differential on the power network that is suitable for the product and conforming to current standards.
• The manufacturer declines any and all liability if any incompatible devices and/or components are installed that compromise the integrity, safety and operation of the product.
• Only original spares must be used for repair or replacement of parts.
• The installer must supply all information regarding the operation, maintenance, and use of individual components and of the system as a whole.

MAINTENANCE
• To guarantee the efficiency of the product, it is essential that qualified professionals perform maintenance at the times and intervals required by the installer, by the manufacturer and by current law.
• All installation, maintenance, repair and cleaning operations must be documented. The user must store all such documentation and make it available to competent personnel.

WARNING FOR THE USER
• Carefully read the enclosed instructions and documentation.
• This product must be used for its intended purpose only. Any other use is improper and therefore dangerous. The information contained herein and in the enclosed documentation may be changed without notice and are in fact provided in an approximate manner for application of the product. Prastel S.p.A. declines any and all liability in this regard.
• Keep this product, devices, documentation and all other items out of the reach of children.
• In case of maintenance, cleaning, breakdown or malfunction of this product, turn off the unit and DO NOT try to repair it yourself. Call a qualified professional only. Disregard of this instruction may cause extremely dangerous situations.